Good Practice Guidance 12: Use of Fentanyl patches in Care Homes

Adapted from previous NHS Oxfordshire guidance and current BHFT end of life guidelines. Advice for care home staff only

Key Points

- Fentanyl patches are not suitable for uncontrolled or rapidly changing pain
- Fentanyl patches should only be commenced when patients have already started strong opioids
- Fentanyl patches are worn continuously and should be changed every 72 hours (3 days)
- Medication errors with fentanyl patches have been recorded, for example old patches not being removed at the time of the new application.
- Information on application and removal of patches is provided in this guidance.
- Extreme care should be taken when starting and stopping therapy with fentanyl patches because of its long duration of action.
- Residents must have ‘when required’ (PRN) normal release strong analgesia available for breakthrough pain once a fentanyl patch is prescribed.
- Fentanyl is a controlled drug and so within care homes its use must be entered into a controlled drug (CD) register and any stock must be stored in an approved CD cabinet. Used patches should be disposed of appropriately.

The use of fentanyl patches can be compromised by incorrect administration. Medication errors have been recorded of old patches not being removed at the time of new patch application or cutting or taping of reservoir patches in an attempt to reduce the dose.

Indications
Fentanyl is a strong opioid which is often used in the management of cancer pain. It is available as a self-adhesive patch that is changed every 72 hours (3 days). This allows a standard amount of fentanyl to cross each hour from the patch into the skin and provides a continuous delivery of fentanyl into the body over the 72 hour administration period.

Fentanyl patches may be suitable in residents who have:
- Not tolerated side effects with oral morphine e.g. vomiting, hallucinations.
- difficulty in swallowing oral medication.
- poor compliance with oral medication.
- renal (kidney) impairment.
There is a delay after a patch is applied before pain relief is achieved. Similarly after removal there is a delay before the pain killing effect stops working. Fentanyl patches should therefore not be used in acute pain or where a rapid titration of opioid medication is needed.

**Storage and recording**
Fentanyl is a controlled drug and so within care homes its use must be entered into a controlled drug (CD) register and any stock must be stored in an approved CD cabinet.

**Transdermal fentanyl patch formulations**
There are two different patch formulations currently available:
- Reservoir patch - the fentanyl is contained within a reservoir and the release of fentanyl is controlled by a rate-limiting membrane e.g. Tilofyl®.
- Matrix patch - the fentanyl is distributed evenly throughout a matrix which controls the release of fentanyl e.g. Durogesic D Trans®, Matrifen®, Fencino®.

Although the release of fentanyl from these two types of patches is similar it is recommended the resident remains on the same type of patch. Matrix patches are thinner and smaller than the reservoir patches.

**Dosing regimen for fentanyl Patches**
- There are five strengths of patches available i.e. 12, 25, 50, 75 and 100micrograms per hour.
- Residents should already be taking strong opioid analgesics prior to conversion to fentanyl patches.
- The patch should be applied at the same time as the last dose of 12 hourly morphine (Zomorph®). The time taken for the patch to work is variable: ensure adequate ‘when required’ (PRN) opioid is available.
- The patch should be applied to dry, non-inflamed, non-irradiated, hairless skin on the upper chest or upper arm (hair may be clipped but not shaved) and replaced every 72 hours on a new area of skin.
- Fentanyl is less constipating than morphine: laxatives should be halved and re-titrated as needed.
- Extreme care should be taken when starting and stopping therapy with fentanyl patches because it has such a long duration of action.
- Fentanyl patches are not suitable for patients with unstable pain. Their 3 day duration of action means that the patches are only suitable for patients who need stable and continuous opioid pain relief requirements.
- Some analgesia (pain relief) will be noted within 12-24 hours after the first patch is applied although maximum effect will not be reached until the 2nd patch is applied.
- Previous analgesic therapy should be phased out gradually from the time of the first patch application until effective pain control is obtained. Ask the resident’s GP for specific instructions regarding this.
- The initial dose of fentanyl prescribed should be based on the resident’s previous 24 hour opioid analgesic requirement.
- Residents must have ‘when required’ (PRN) normal release strong analgesia available for breakthrough pain once a fentanyl patch is prescribed (normally one sixth of the...
equivalent 24-hour total oral morphine dose). When to use ‘when required’ normal release strong analgesia available for breakthrough pain should be clearly documented in the resident’s care plan and details should include dosages, when to give. This should also be included on the MAR sheet.

- Dose adjustment of fentanyl patches, if necessary, should be at 72 hour intervals in steps of 12-25 micrograms/hour. This should only be undertaken in line with the resident’s prescription from the GP and clearly documented in the resident’s care plan. Caution needed in residents with renal (kidney) failure.
- The patches are worn continuously and changed every 72 hours.
- More than one patch can be used at a time for doses greater than 100 micrograms per hour but the patches should be changed at the same time to avoid confusion. The resident’s GP will advise if this is required and it should be clearly documented in the resident’s care plan.
- If the pain is not controlled then alternative analgesia may need to be considered. In either of the above circumstances this should be discussed with the resident’s GP.
- When converting a resident to fentanyl patches the conversion should always be clearly documented in their care plan and on the MAR chart. This is to ensure both preparations are not continued as often two products will be required for a very short period of time whilst the fentanyl patch becomes effective. The modified release (M/R) version of opioid (e.g. zomorph caps) must stop before the patch starts however, any ‘when required’ (PRN) doses of immediate release opioid (e.g. oramorph®) are still safe and need to continue. Further information and advice on the above should always be sought from the resident’s GP or pharmacist.
- Where there is opioid overdose or side effects suspected, patches should be removed immediately in cases of breathing difficulties, marked drowsiness, confusion, dizziness, or impaired speech. Contact the resident’s GP immediately.

Application and removal of patch

Using and changing patches:
- Always remove the old patch before applying the new one.
- Always change your patch at the same time of day every 3 days (72 hours).
- Make a note of the day, date and time you apply the patch on the MAR sheet to remind you when the patch is next needed to be changed.

Where to apply the patch:
- Apply to clean, dry, non-inflamed, non-irradiated, hairless skin on the upper arm or trunk of body. Body hair may be clipped or cut with scissors but do not shaved (shaving irritates skin).
- Ensure the skin has been washed or cleaned with cold water and dried before application.
- Do not use soap, talc, cleansers, creams or moisturisers on area of application prior to applying the patch.
- Do not apply a patch immediately after a hot bath or shower.
- Do not take a patch out of its pouch until you are ready to use it.
- Never divide or cut the patches.
• When applying, press in place firmly with the palm of the hand for 30 seconds making sure it sticks well.

• The patch should be dated or a patch chart used to indicate the date and position of the patch on the resident so that sites can be rotated. It should also be clear on the MAR sheet when a resident’s patch should be changed.

• Do not apply a patch on the same place twice in a row. You should allow several days (3-6 days) to pass before applying a patch to the same area of skin.

• Residents can bathe or shower (with care) whilst wearing a patch but the water should not be too hot.

• **Heat (e.g. hot baths, electric blankets, hot water bottles) should NEVER be applied over the top of the patch as it may enhance the absorption of fentanyl.**

• An increased temperature / fever may also increase absorption and the resident should be monitored for side effects and toxicity. Advice from the resident’s GP should be sought.

• Site irritation, usually from the adhesive, may necessitate a change of brand and so should be discussed with the resident’s GP.

**Disposing of the patch:**

• Remove the old patch before applying a new one.

• After removal, fold the patch with the adhesive sides inwards so that the sticky side stick to each other.

• Used patches still contain fentanyl. Place in the original sachet and discard in the medicines disposal bin or for care homes without nursing they can also return to the supplying pharmacy for immediate destruction. Wash hands thoroughly after handling.

• Ideally the underlying skin should be allowed to rest for 3-6 days before applying another patch to the same area.

• When ordering repeat fentanyl patches it is important to ensure the resident has enough for continued therapy but it is also important not to over order the patches as the dosage of the patch may need to be changed.

**Discontinuation of patch**

A reservoir of fentanyl accumulates in the body and significant levels persist for at least 24 hours after removal of a fentanyl patch. Therefore on discontinuation of fentanyl patches the resident should still be carefully monitored for toxicity.

When discontinuing fentanyl patches and converting to another strong opioid the conversion should always be clearly documented in the resident’s care plan and on the MAR chart to ensure both products are not continued together.

**Disposal of fentanyl Patches**

First remove the old patch before applying a new one. After removal, fold the patch with the adhesive sides inwards so that the sticky side stick to each other and then place in the original sachet and discard in the medicines disposal bin. For care homes without nursing they can also return to the supplying pharmacy for immediate destruction. Wash hands thoroughly after handling.
Any unused patches should also be disposed of appropriately in line with the care homes medicines waste disposal policy.

**Side effects**
These are similar to other strong opioids such as morphine and include nausea and vomiting, dizziness, drowsiness (including day time drowsiness), confusion and hallucinations, constipation and sweating. Side-effects experienced when opioids are commenced or increased often reduce over the subsequent 48 - 72 hours.

Toxicity is more likely to occur in the elderly and in those with liver or kidney disease. Signs of toxicity include respiratory depression, excessive drowsiness/reduced level of consciousness and twitching – medical advice should be sought immediately if any of these symptoms are experienced.

Some patients experience opioid withdrawal when changing from morphine to fentanyl. Symptoms are ‘flu’ like and may last for a few days – advice on managing this should be sought from the resident’s GP before the resident is changed over and it should be documented in the care plan and if medication is required on the MAR chart.

**Further information**

- Further information on managing medicines in care homes is available in Outcome 9 of the CQC Essential Standards of Quality and Safety
- CQC website with further information about the statutory notifications; http://www.cqc.org.uk/organisations-we-regulate/registered-services/notifications/notifications-non-nhs-trust-providers
- The Royal Pharmaceutical society of Great Britain has produced professional pharmaceutical guidance ‘The handling of medicines in Social Care’ also provides information on managing medication errors: http://www.rpharms.com
- The Nursing and Midwifery Council (NMC) provides guidance and advice on a number of topics which is available on their website; http://www.nmc-uk.org
- The National Patient Safety Agency also contains safety alerts related to medicines; http://npsa.nhs.uk/

The above links are made available solely to indicate their potential usefulness to users. The user must use their own judgment to determine the accuracy and relevance of the information they contain.